

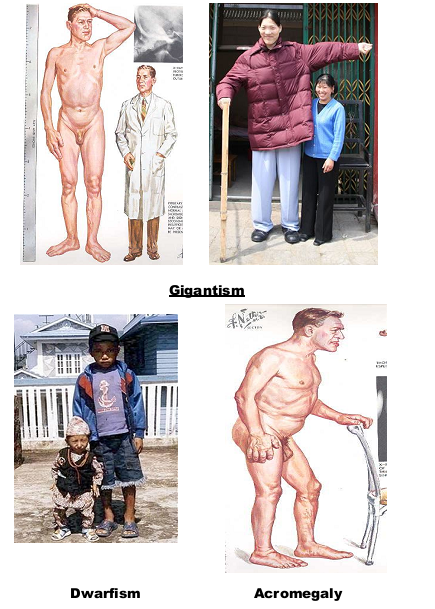
Some Important

Clinical Signs and Notes

In Endocrinology (Physiology)

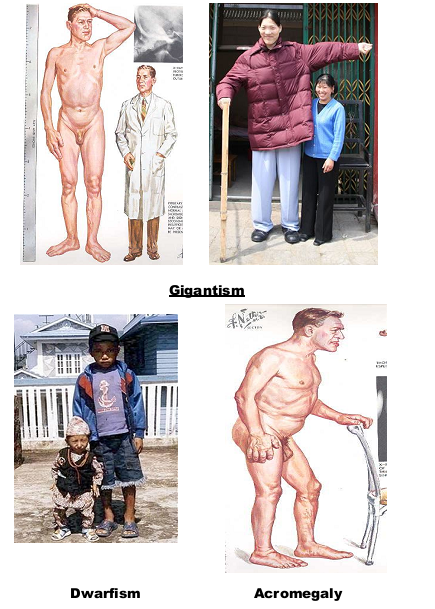
* **DWARFISM** = 🡫 Growth hormone **during childhood**.
* **Characterized by:**

1. **Proportionate dwarfism (short stature):** Features of body are proportionate to each other, but rate of development is decreased.
2. **No** thyroid deficiency. **No** adrenocortical deficiency.
3. **No** mental retardation (Wise person with small stature).





* **Gigantism = 🡩** GH by Acidophils in anterior pituitary ***before*** union of epiphysis **(in children).**
* ***Cause:* Pituitary Adenoma**
* ***Clinical picture:***
* All body tissues grow rapidly i.e. general overgrowth of skeleton 🡪 person becomes a **Giant.**
* **H**igh BMR , **H**yperglycemia & diabetes mellitus
* **H**ypogonadism (Low gonadotropins).
* Short life, if survives till adulthood 🡪 **Acromegaly**





**Acromegaly Acro** = extremity as hands and feet.  **Megaly** = large.

* **↑↑** GH by **A**cidophil ***After*** union of epiphysis (in **A**dult).

**Bone thickening:**

* Protruding lower jaw **(= prognathism)** & upper jaw, supraorbital ridge & separation of teeth 🡪coarsening of facial features **(bone deformities).**
* Hands and feet (=**acral** parts) are enlarged (thick, broad fingers).
* Bowing of spine **(kyphosis).**

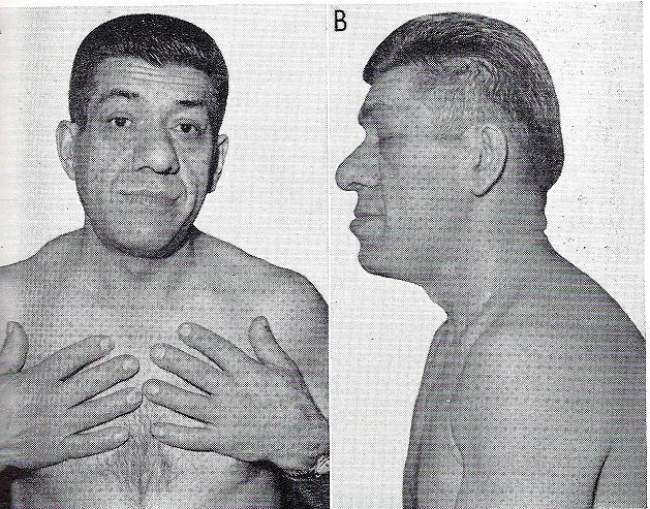
**Soft tissue enlargement:**

**- Deeper voice** because larynx enlarges

**- Bigger tongue and lips** that affects breathing

- Cartilages in nose and ears enlarge making **nose and ears broader.**









***CRETINISM*  Hypothyroidism in utero or early life**

***Clinical picture:*** The defect is usually detected at **6 months of age.**

**-** The infant is **mentally retarded** with **coarse facies.**

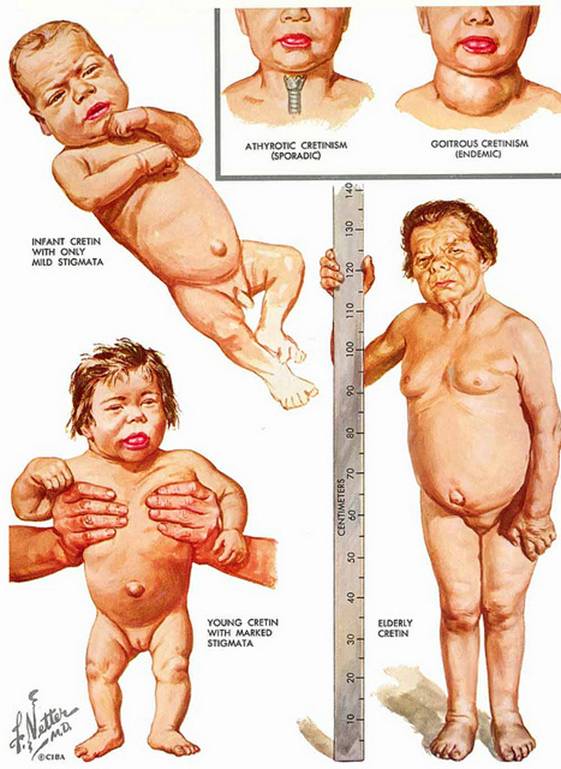
**- Short child** with short limbs.

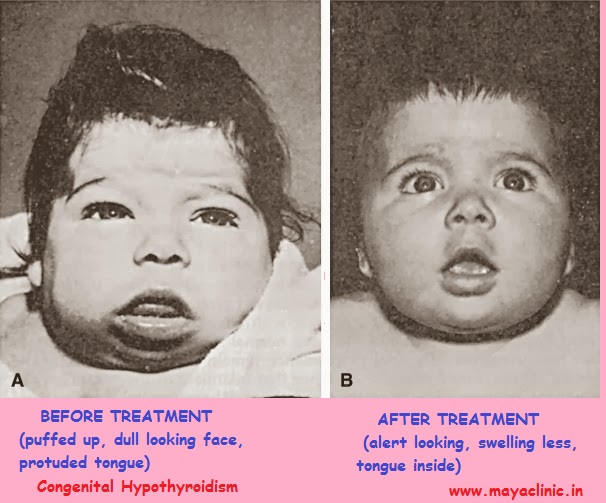
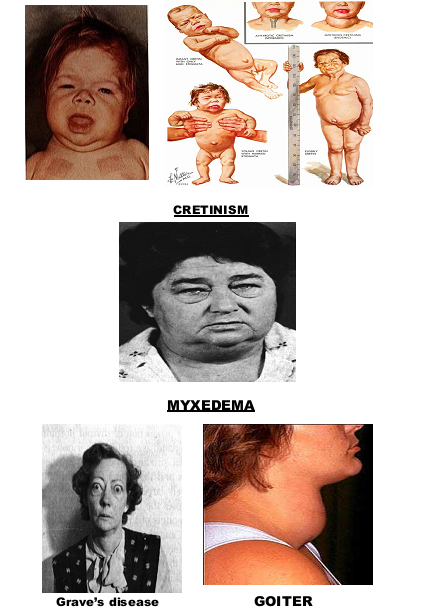
**- D**ry skin, scanty **hair** &large protruding **tongue** & open mouth.

**- D**epressed **nose** due to delayed **bone** growth.

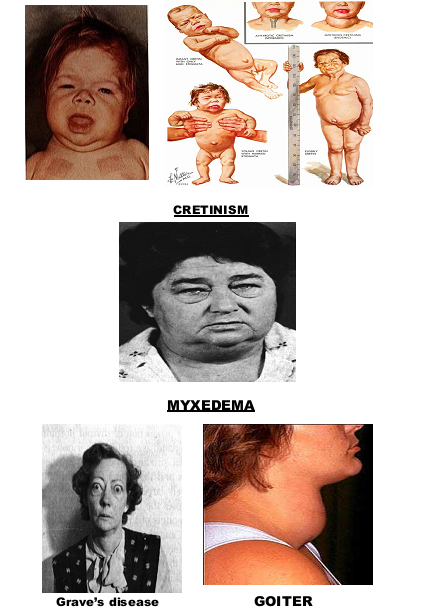
**- D**elayed **teeth** eruption, defective speech & hoarsy cry.

**-** Weak **abdominal wall,** bulging abdomen and umbilical hernia.









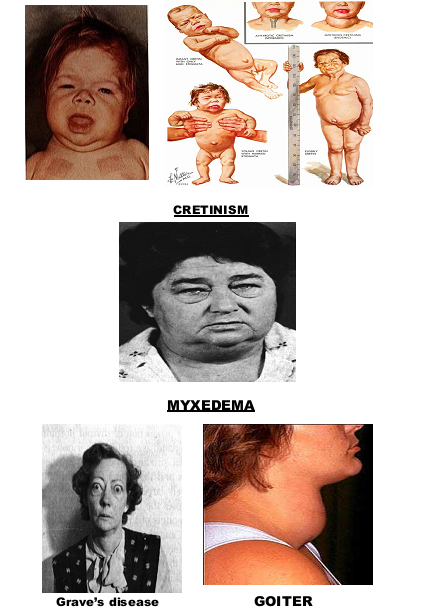


**EXOPHTHALMOS**

**Goiter** is an enlargement of thyroid gland.

1. **Simple goiter:** due to deficiency of iodine supply 🡪 🡫 thyroid hormones formation 🡪 🡩 TSH 🡪 🡩 thyroid growth.
2. **Exophthalmic goiter:** Occurs when **TSI** excessively stimulates the thyroid gland.





**TETANY**

1. **Manifest tetany:**

* Plasma Ca++ level is below 7 mg%
* Hypocalcaemia manifest itself by cramps of the limbs in form of:
* ***Carpal Spasm:*** (Obstetrician's hand) **flexion** at elbow, wrist, metacarpophalangeal joints & **extension** at interphalangeal joints and adduction of thumb.
* ***Pedal Spasm:*** Dorsiflexion of foot and planter flexion of toes.
* ***Laryngeal spasm:*** Asphyxia (fatal).

1. **Latent tetany:**

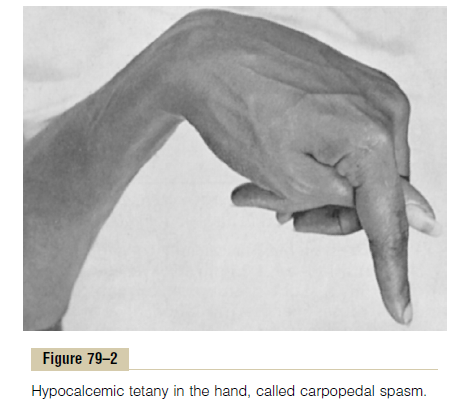
* Plasma Ca++ level is below 9 mg and above 7 mg/dl
* **Diagnosis of latent tetany**

**1. Plasma Ca++ level**

**2. Trousseau's sign**

**3. Chvostek's sign**





**Cushing,s syndrome** Prolonged excessive production of **C**ortisol due to:

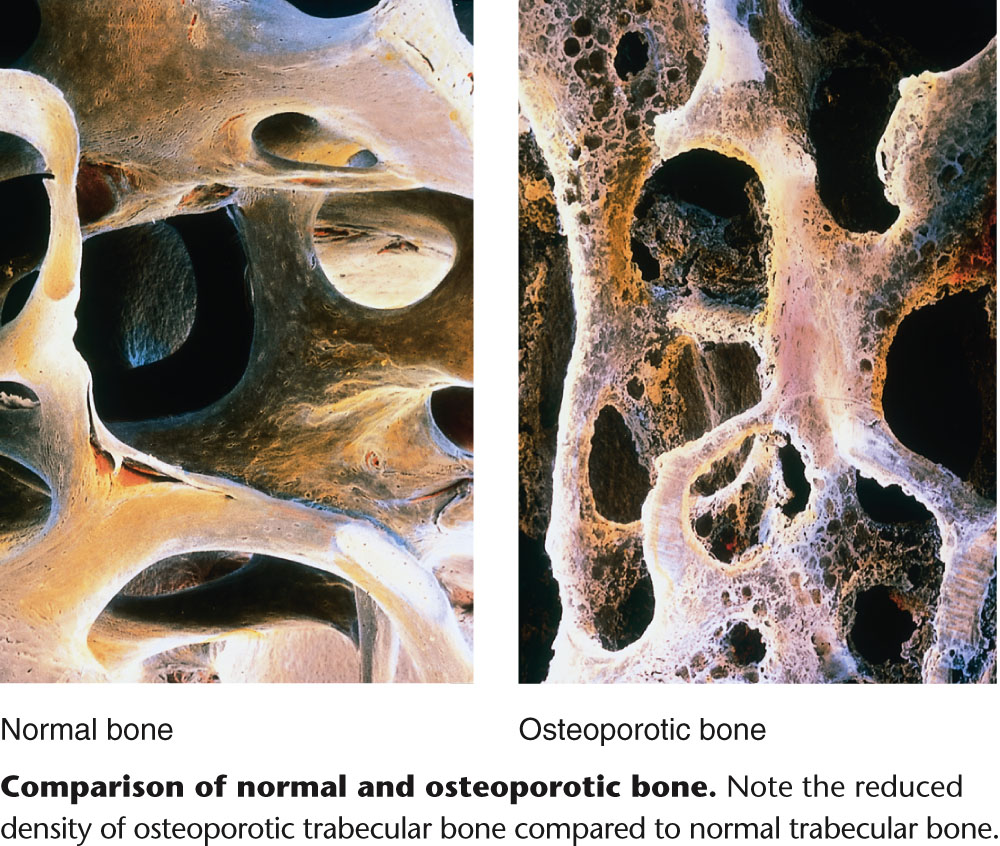
* **Causes:**

1. **Adrenal** tumor **(Cushing,s syndrome)**  🡪 🡩 🡩 Cortisol.

**2- Pituitary** adenoma **(Cushing,s disease)** 🡪 🡩 🡩 ACTH 🡪 adrenal hyperplasia.

* **CLINICAL PICTURE**
* **C** central obesity, cervical fat pads, collagen fiber weakness
* **U** urinary free cortisol & glucose increase
* **S** striae & suppressed immunity
* **H** hyperglycemia, hypertension & hirsutism
* **I** increased plasma cortisol & glucose level.
* **N** neoplasms (adrenal or pituitary tumor)
* **G** gonadal affection (amenorrhea) & growth retardation





**Endocrinal causes of Osteoporosis:**

1. Cushing, s syndrome

2. Hyperparathyroidism

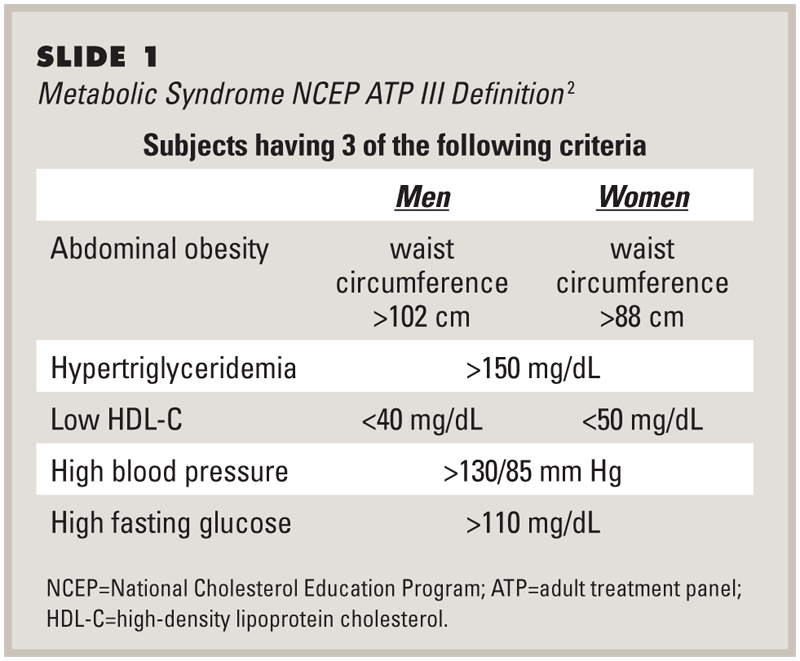


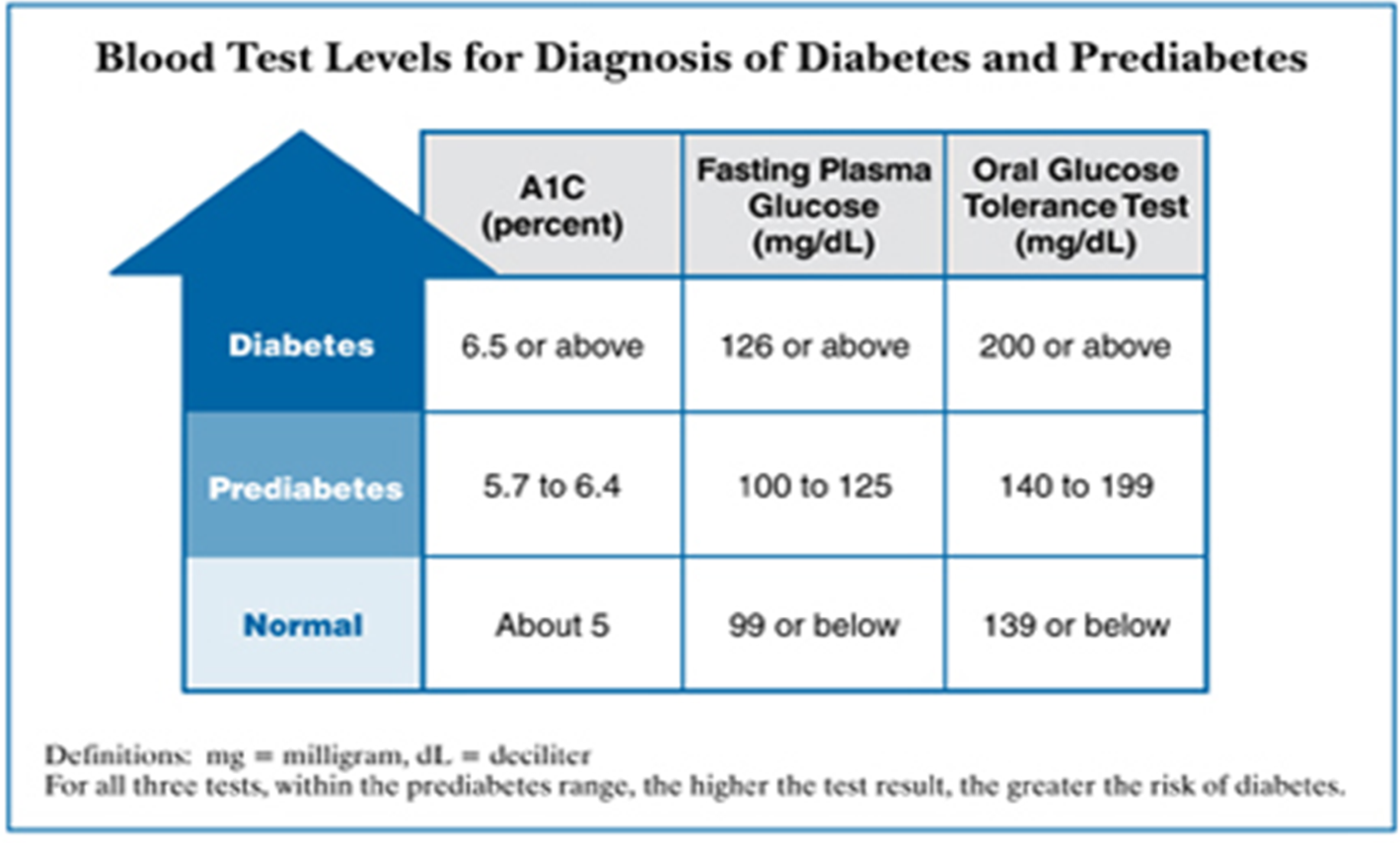
**Endocrinal causes of OBESITY:**

1. Cushing, s syndrome

2. Myxedema

**Criteria of metabolic syndrome:**



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**Endocrinal causes of polyuria**

**1. Diabetes mellitus**

**2. Diabetes insipidus**

**Endocrinal causes of tetany**

**1. Hyperparathyroidism**

**2. Conn's syndrome**

**Endocrinal causes of short stature**

**1. Pituitary dwarfism**

**2. Cretinism**

**Endocrinal causes of hyperglycemia**

**1. Acromegaly**

**2. Cushing's syndrome**

**Endocrinal causes of hypertension**

**1. Conn's syndrome**

**2. Cushing's syndrome**